

### **REMARKS**

This is a full and timely response to the final Office Action of January 3, 2008.

Reexamination, reconsideration, and allowance of the application and all presently pending claims are respectfully requested.

Upon entry of this Second Response, claims 1-10 and 12-32 are pending in this application, and claims 28-32 are newly added. It is believed that the foregoing amendments add no new matter to the present application.

### **Response to §103 Rejections**

In order for a claim to be properly rejected under 35 U.S.C. §103, the combined teachings of the prior art references must suggest all features of the claimed invention to one of ordinary skill in the art. See, e.g., *In Re Dow Chemical Co.*, 837 F.2d 469, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988), and *In re Keller*, 642 F.2d 413, 208 U.S.P.Q. 871, 881 (C.C.P.A. 1981). In addition, "(t)he PTO has the burden under section 103 to establish a *prima facie* case of obviousness." *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). Furthermore, the Federal Circuit has stated that "(i)t is impermissible, however, to simply engage in hindsight reconstruction of the claimed invention, using the applicant's structure as a template and selecting elements from references to fill the gaps." *In re Gorman*, 933 F.2d 982, 987, 18 U.S.P.Q.2d 1885 (1991).

## Claim 1

Claim 1 presently stands rejected under 35 U.S.C. §103 as purportedly being unpatentable over *Delvaux* (U.S. Patent No. 6,777,305) in view of *Daruwalla* (U.S. Patent No. 7,058,007). Claim 1 reads as follows:

1. A communication system, comprising:

a first transceiver coupled to a first subscriber line, the first transceiver configured to communicate via the first subscriber line with a remote transceiver that is located at a remote premises and coupled to the first subscriber line, the first subscriber line comprising a first plurality of conductive connections extending from the first transceiver to the remote transceiver coupled to the first subscriber line;

a second transceiver coupled to a second subscriber line, the second transceiver configured to communicate via the second subscriber line with a remote transceiver that is located at the remote premises and coupled to the second subscriber line, the second subscriber line comprising a second plurality of conductive connections extending from the second transceiver to the remote transceiver coupled to the second subscriber line;

a third transceiver coupled to a third subscriber line, the third transceiver configured to communicate via the third subscriber line with a remote transceiver that is located at the remote premises and coupled to the third subscriber line, the third subscriber line comprising a third plurality of conductive connections extending from the third transceiver to the remote transceiver coupled to the third subscriber line; and

logic configured to receive a data stream comprising data to be received by data communication equipment at the remote premises, the logic configured to split the data stream such that a portion of the data is modulated and transmitted by the first transceiver across the first plurality of conductive connections to the remote transceiver coupled to the first subscriber line while a portion of the data stream is modulated and transmitted by the second transceiver across the second plurality of conductive connections to the remote transceiver coupled to the second subscriber line, ***the logic configured to switch communication from the first transceiver to the third transceiver in response to a detection of a communication problem associated with the first subscriber line such that a portion of the data is modulated and transmitted by the third transceiver across the third plurality of conductive connections to the remote transceiver coupled to the third subscriber line while a portion of the data stream is modulated and transmitted by the second transceiver across the second plurality of conductive connections to the remote transceiver coupled to the second subscriber line, the logic further configured to switch communication from the second transceiver to the third transceiver in response to a detection of a communication problem associated with the second subscriber line such that a portion of the data is modulated and transmitted by the third transceiver across the third plurality of conductive connections to the remote transceiver coupled to the third subscriber line while a portion of the data stream is modulated and transmitted by the first***

***transceiver across the first plurality of conductive connections to the remote transceiver coupled to the first subscriber line.*** (Emphasis added).

Applicants respectfully assert that the alleged combination fails to suggest at least the features of pending claim 1 highlighted hereinabove.

In this regard, in rejecting claim 1, it is alleged in the Office Action that *Delvaux* teaches a European version of the HDSL architecture with three transceivers to provide 2.048 Mbps. It is further asserted in the Office Action that "(s)ince the T-1 service requires one less transceiver than the E-1 service, Delvaux's teaching suggests a spare transceiver can be obtained by using the European three transceiver set to provide T-1 capacity service." Applicants respectfully traverse the assertion that *Delvaux* teaches a "spare transceiver." In this regard, *Delvaux* teaches a third transceiver that is to be used to transmit data in order to enable a higher data rate. There is nothing *Delvaux* or the other references of the cited art to suggest that this third transceiver should be used as a "spare" or that a European configuration to deliver E-1 capacity service should be used to deliver T-1 capacity service instead. Applicants respectfully assert that the alleged modification of *Delvaux* is not sufficiently supported by the cited art. "The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritch*, 972 F.2d 1260, 1266, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). "Modification unwarranted by the disclosure of a reference is improper." *Carl Schenck A.G. v. Nortron Corp.*, 713 F.2d 782, 218 U.S.P.Q. 698, 702 (Fed. Cir. 1983). Moreover, Applicants respectfully submit that the alleged modification of *Delvaux* is not properly based on the teachings of the cited art but is instead based on impermissible hindsight reconstruction of Applicants' invention.

For at least the above reasons, Applicants respectfully assert that the cited art fails to suggest each feature of claim 1 and the rejection of claim 1 under 35 U.S.C. §103 is improper. Thus, the 35 U.S.C. §103 rejection of claim 1 should be withdrawn.

### **Claims 2-6 and 28**

Claims 2, 3, and 5 presently stand rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Delvaux* in view of *Daruwalla*. In addition, claim 4 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Delvaux* in view of *Daruwalla* and further in view of *Doll* (U.S. Patent No. 5,694,398), and claim 5 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Delvaux* in view of *Daruwalla* in further view of *Renucci* (U.S. Patent No. 6,996,134). Claim 6 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Delvaux* in view of *Daruwalla* in further view of *Obelode* (U.S. Patent No. 4,935,642), and claim 28 has been newly added via the amendments set forth herein. Applicants submit that the pending dependent claims 2-6 and 28 contain all features of their respective independent claim 1. Since claim 1 should be allowed, as argued hereinabove, pending dependent claims 2-6 and 28 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

### **Claim 7**

Claim 7 presently stands rejected under 35 U.S.C. §103 as purportedly being unpatentable over *Delvaux* in view of *Daruwalla*. Claim 7 reads as follows:

7. A communication system, comprising:
  - a first transceiver coupled to a first subscriber line, the first transceiver configured to communicate via the first subscriber line with a remote transceiver that is located at a remote premises and coupled to the first subscriber line, the first subscriber line comprising a first plurality of conductive connections extending from the first transceiver to the remote transceiver coupled to the first subscriber line;
  - a second transceiver coupled to a second subscriber line, the second transceiver configured to communicate via the second subscriber line with a remote transceiver that is located at the remote premises and coupled to the second subscriber line, the second subscriber line comprising a second plurality of

conductive connections extending from the second transceiver to the remote transceiver coupled to the second subscriber line;

a third transceiver coupled to a third subscriber line, the third transceiver configured to communicate via the third subscriber line with a remote transceiver that is located at the remote premises and coupled to the third subscriber line, the third subscriber line comprising a third plurality of conductive connections extending from the third transceiver to the remote transceiver coupled to the third subscriber line; and

logic configured to receive an input data stream comprising data to be received by data communication equipment at the remote premises, the logic configured to split the data stream into at least a first output data stream and a second output data stream, wherein the first transceiver is configured to transmit at least a portion of the first output data stream across the first subscriber line while the second transceiver is transmitting at least a portion of the second output data stream across the second subscriber line, ***the logic further configured to enable the third transceiver to selectively backup both of the first and second transceivers such that the third transceiver communicates a portion of either the first or second output data stream in response to a detection of a communication problem while one of the first and second transceivers is communicating a portion of the other output data stream.*** (Emphasis added).

For at least reasons similar to those set forth above in the arguments for allowance of claim 1, Applicants respectfully assert that the cited art fails to suggest at least the features of claim 7 highlighted above. Thus, the 35 U.S.C. §103 rejection of claim 7 should be withdrawn.

#### **Claims 8-10, 12, 24-26, and 29**

Claims 8 and 24-26 presently stand rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Delvaux* in view of *Daruwalla*. In addition, claim 9 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Delvaux* in view of *Daruwalla* and further in view of *Doll*, and claim 10 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Delvaux* in view of *Daruwalla* further in view of *Obelode*. Also, claim 12 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Delvaux* in view of *Daruwalla* in further view of *Renucci*, and claim 29 has been newly added via the amendments set forth herein. Applicants submit that the pending dependent claims 8-10, 12, 24-26, and 29 contain all features

of their respective independent claim 7. Since claim 7 should be allowed, as argued hereinabove, pending dependent claims 8-10, 12, 24-26, and 29 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

### **Claim 13**

Claim 13 presently stands rejected under 35 U.S.C. §103 as purportedly being unpatentable over *Delvaux* in view of *Daruwalla*. Claim 13 reads as follows:

13. A communication system, comprising:

a first transceiver coupled to a first subscriber line, the first transceiver configured to communicate via the first subscriber line with a remote transceiver that is located at a remote premises and coupled to the first subscriber line, the first subscriber line comprising a first plurality of conductive connections extending from the first transceiver to the remote transceiver coupled to the first subscriber line;

a second transceiver coupled to a second subscriber line, the second transceiver configured to communicate via the second subscriber line with a remote transceiver that is located at the remote premises and coupled to the second subscriber line, the second subscriber line comprising a second plurality of conductive connections extending from the second transceiver to the remote transceiver coupled to the second subscriber line;

a third transceiver coupled to a third subscriber line, the third transceiver configured to communicate via the third subscriber line with a remote transceiver that is located at the remote premises and coupled to the third subscriber line, the third subscriber line comprising a third plurality of conductive connections extending from the third transceiver to the remote transceiver coupled to the third subscriber line; and

logic configured to split an input data stream into at least a first output data stream and a second output data stream, the logic configured to interface the first and second output data streams with the first and second transceivers such that the first and second transceivers respectively transmit the first and second output data streams on the first and second subscriber lines, ***the logic further configured to interface one of the output data streams with the third transceiver in response to a communication problem associated with one of the first and second subscriber lines, the logic further configured to dynamically select the one output data stream for interfacing with the third transceiver based on which of the first and second subscriber lines is associated with the communication problem.*** (Emphasis added).

For at least reasons similar to those set forth above in the arguments for allowance of claim 1, Applicants respectfully assert that the cited art fails to suggest at least the features of claim 13 highlighted above. Thus, the 35 U.S.C. §103 rejection of claim 13 should be withdrawn.

**Claims 14-16 and 30**

Claim 15 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Delvaux* in view of *Daruwalla* and further in view of *Renucci*. In addition, claim 14 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Delvaux* in view of *Daruwalla* and further in view of *Doll*, and claim 16 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Delvaux* in view of *Daruwalla* in view of *Obelode*. Further, claim 30 has been newly added via the amendments set forth herein. Applicants submit that the pending dependent claims 14-16 and 30 contain all features of their respective independent claim 13. Since claim 13 should be allowed, as argued hereinabove, pending dependent claims 14-16 and 30 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

### Claim 17

Claim 17 presently stands rejected under 35 U.S.C. §103 as purportedly being unpatentable over *Delvaux* in view of *Daruwalla*. Claim 17 reads as follows:

17. A communication method, comprising the steps of:  
receiving a data stream;  
splitting the data stream into at least a first data stream and a second data stream;  
***communicating at least a portion of the first data stream between a first pair of transceivers on a first subscriber line***, the first subscriber line extending from one of the first pair of transceivers to the other of the first pair of transceivers and comprising a first twisted pair;  
***communicating, during the communicating at least the portion of the first data stream step, at least a portion of the second data stream between a second pair of transceivers on a second subscriber line***, the second subscriber line extending from one of the second pair of transceivers to the other of the second pair of transceivers and comprising a second twisted pair; and  
***enabling a third pair of transceivers coupled to a third subscriber line to selectively backup both of the first and second pair of transceivers such that the third pair of transceivers communicates a portion of either the first or second data stream in response to a detection of a communication problem during one of the communicating steps***, the third subscriber line extending from one of the third pair of transceivers to the other of the third pair of transceivers and comprising a twisted pair. (Emphasis added).

For at least reasons similar to those set forth above in the arguments for allowance of claim 1, Applicants respectfully assert that the cited art fails to suggest at least the features of claim 17 highlighted above. Thus, the 35 U.S.C. §103 rejection of claim 17 should be withdrawn.

### Claims 18-20 and 27

Claims 18 and 27 presently stand rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Delvaux* in view of *Daruwalla*. In addition, claim 19 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Delvaux* in view of *Daruwalla* and further in view of *Doll*, and claim 20 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Delvaux* in view of *Daruwalla* further in view of *Obelode*. Also, claim 31 has been newly added via the amendments



set forth herein. Applicants submit that the pending dependent claims 18-20, 27, and 31 contain all features of their respective independent claim 17. Since claim 17 should be allowed, as argued hereinabove, pending dependent claims 18-20, 27, and 31 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

#### **Claim 21**

Claim 21 presently stands rejected under 35 U.S.C. §103 as purportedly being unpatentable over *Delvaux* in view of *Daruwalla*. Claim 21 reads as follows:

21. A communication method, comprising the steps of:  
splitting a data stream into a first data stream and a second data stream;  
interfacing the first data stream with a first transceiver such that the first data stream is communicated by the first transceiver on a first subscriber line to a remote transceiver that is located at a remote premises and coupled to the first subscriber line, the first subscriber line comprising a first plurality of conductive connections extending from the first transceiver to the remote transceiver coupled to the first subscriber line;

interfacing, during the interfacing the first data stream step, the second data stream with a second transceiver such that the second data stream is communicated by the second transceiver on a second subscriber line to a remote transceiver that is located at the remote premises and coupled to the second subscriber line, the second subscriber line comprising a first plurality of conductive connections extending from the second transceiver to the remote transceiver coupled to the second subscriber line;

detecting a communication problem associated with one of the first and second subscriber lines;

***interfacing, in response to the detecting step and during one of the interfacing steps, one of the first and second data streams with a third transceiver such that the one data stream is communicated by the third transceiver on a third subscriber line*** to a remote transceiver that is located at the remote premises and coupled to the third subscriber line, the third subscriber line comprising a third plurality of conductive connections extending from the third transceiver to the remote transceiver coupled to the third subscriber line; and  
dynamically selecting the one data stream to be interfaced with the third transceiver in response to the detecting step based on which of the first and second subscriber lines is associated with the communication problem. (Emphasis added).

For at least reasons similar to those set forth above in the arguments for allowance of claim 1, Applicants respectfully assert that the cited art fails to suggest at least the features of claim 21 highlighted above. Thus, the 35 U.S.C. §103 rejection of claim 21 should be withdrawn.

**Claims 22, 23, and 32**

Claim 22 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Delvaux* in view of *Daruwalla* and further in view of *Doll*, and claim 23 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Delvaux* in view of *Daruwalla* further in view of *Obelode*. In addition, claim 32 has been newly added via the amendments set forth herein. Applicants submit that the pending dependent claims 22, 23, and 32 contain all features of their respective independent claim 21. Since claim 21 should be allowed, as argued hereinabove, pending dependent claims 22, 23, and 32 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

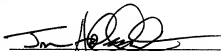
**CONCLUSION**

Applicants respectfully request that all outstanding objections and rejections be withdrawn and that this application and all presently pending claims be allowed to issue. If the Examiner has any questions or comments regarding Applicants' response, the Examiner is encouraged to telephone Applicants' undersigned counsel.

Respectfully submitted,

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